THE DEFECTIVE CHILD[1]

By MARY R. SWARD

Formerly Psychologist at the School for Feeble-Minded Children, Glenwood, Iowa

In attempting to present this discussion so that we may see that the field concerning the defective child is a vital and most interesting one for persons engaged in the nursing profession, many things come to me of which to tell you, the various degrees of defectiveness, the special groups as our physicians distinguish them, the causes that contribute to give us that part of the population which is *feebly gifted,* the treatment of malformations and deformities, all the physical weaknesses and conditions which often accompany the mental disability. You see there are many phases.

However, today, I am going to confine myself to the discussion of the child under five years which is, for some known or unknown reason, mentally below normal, and give you a few points in regard to the treatment, mental and physical. Perhaps already you have had experience with this class of patients, know their ways and have an adequate system of dealing with them and dealing with the relatives, for with so young a child, there is usually a family, which the nurse has to win or lose, as well as the child.

If you have not met with this problem, sooner or later it will confront you, and you will be called upon to use your knowledge and judgment. One cannot be versed in every phase of nursing, perhaps, but if your mind is an *inquiring* one, you will want to know some of the general points in this special work, so I endeavor to present them, considering four points.

1. Normal intelligence.
2. Development of the senses.
3. The tests for mentality.
4. Training and active treatment.

First. In estimating normal intelligence, we must, of course, have a clear conception of the normal. What does a normal baby do at various stages of its mental growth?

According to latest investigation, a normal baby can hear and see immediately after birth. It feels pain, cries when it is uncomfortable or hungry.

[1] Read at the annual meeting of the Nebraska State Nurses' Association, October 17, 1916.

At one month, it will momentarily follow a bright light and begins to locate the direction of sounds.

At two months it responds to snapping of the fingers, follows bright objects and rejects unpleasant-tasting food or drugs.

When a baby is three months old, normal in body and mind, it holds its head erect, turns it from side to side, shows an inclination to grasp objects held before it, and coos when in good humor.

At four months it recognizes those who care for it, holds a rattle and brings everything to its mouth.

At five months, the hands go out to be taken from one to another. If it cries when hungry and food is brought, immediately the cry ceases.

When the half year is reached, it is interested in its surroundings, likes to be taken out of doors, and sits up with slight support.

At seven months it recognizes familiar faces from a distance, begins to imitate sound, laughs aloud, and cries when scolded.

At eight months, it creeps about and attempts to stand if held erect. It understands and performs baby tricks, e.g., shakes its hand by-by, plays "peep."

At nine months it knows its name, holds and carries a bottle, and if properly trained, begins to indicate its desire to attend to the bodily functions.

At one year, it stands alone and attempts to walk, knows the difference between articles of food to which it is accustomed, and throws kisses.

When fifteen months old, it makes itself understood by signs or baby language. It is interested in picture books, toys, can turn pages and scribble with a pencil. It can point to its ears, eyes, etc.

At a year and a half, it can play ball, imitate all sorts of action, such as dance, jump, hide, rock a doll. It knows the difference between right and wrong, and obeys or rebels.

At two years, it knows exactly what it wants in food and toys, and usually is able to call for them, and to feed itself.

At two and a half years, it can do little errands about the house, it asks questions. It recognizes different colors, builds blocks correctly, memorizes simple tunes and nursery rhymes.

At three years, it uses the personal pronoun, shows an inclination to learn to dress itself, indicates the seat of pain or annoyance.

Remember that these activities are a normal average. Some children excel in certain ones and are slower in others. This is the standard for the average.

Second. The development of the senses.

As you have followed the baby's intelligence by the activities I

have given, you see that a normal child is supposed to acquire the power of sight, hearing, taste and touch, during the first four months of its life; within the second four months, attention, voluntary motion and perception are added; in the third four months, imitation, speech and understanding, and gradually, from month to month, the child grows and strengthens in these qualities.

Let us now turn to the child whose mental development has not progressed normally and note the difference. As a rule, idiots gaze vaguely into space or irregularly rotate their eyes in all directions. In testing the ability to see, however, we must be sure that there is no defect of vision. The sense of hearing is manifest when the child is started by some sudden noise, e.g., ringing of a bell, clapping hands. One of the earliest signs of "something wrong" is obtuseness or perversion of the sense of taste. Feeble-minded infants will either chew everything, regardless of taste, or will spit out the most pleasant delicacies. They relish quinine as readily as sugar, or refuse both.

Almost all idiots are insensitive to pain or temperature, hence are frequently burned, bruised or bitten, without showing discomfort. No other defective mental action as readily betrays the mental incapacity of an infant as the lack of power of attention. The child is unconcerned in its environment, devoid of initiative movement and spontaneity, and even when it has learned to walk and go about, sits for hours in one spot, undisturbedly sucking its thumbs. The utter incapacity of attention, of course, goes hand in hand with dulness of perception, fewer impressions reach the brain which is less capable in the perception of outside impulses. The memory is so uncertain, too, that impressions received are not kept and the child does not attempt to guard itself from injury, nor does it recognize the care of familiar hands. Imitation is a slow, awkward process and extremely limited, there is invariably a muscular insufficiency and incoördination. There is marked delay in walking and talking and when the ability to talk is developed, it is often an incoherent chatter. However, a child may have these attributes, may be able to see, hear, taste, pay attention, etc., and yet we readily see that it is subnormal. The mental powers are slower in unfolding. It is automatic in its performances.

And so the object of the mental tests, the third point in my discussion, is to determine to which period of life the mental capacity of the infant under examination, as compared with the average normal child, corresponds. The tests are based on studies made by child psychologists and physicians, and while they may vary slightly, are practically the same. The American Medical Association issues a standard score-card, giving mental tests for babies from six months to

five years, and various texts give a list of mental tests. The Binet-Simon measuring scale for intelligence is the most widely known, and used. These tests are short, direct mental questions bearing upon simple matters of every-day life, gradually becoming more difficult and involving new mental processes as the age of the child increases. They were the work of Alfred Binet, an eminent child psychologist of Paris, and Dr. Thomas Simon, a physician and alienist of the same place. The first edition was published in 1905, then a revision in 1908; while the 1911 form, modified to American usage, is the standard in this country. Naturally, psychologists are studying the subject constantly and devising further tests. The Binet-Simon tests extend to twelve years, with an addition of a fifteen year test, and have been found very reliable for the first twelve years. Dr. H. H. Goddard, Director of Psychological Research at the Training School in Vineland, New Jersey, is a well known authority on the use of the scale in America. Between 1910 and 1914, 20,000 booklets of explanation and 80,000 record blanks were printed and distributed from the Vineland laboratory alone. The scale is now being extended beyond the twelve-year limit in the Stanford Revision, by Louis M. Terman, of Leland Stanford University.

To give you an illustration of the Binet-Simon scale I take the tests for the ages five and seven.

At age five, a child can compare weights, telling which is heavier; copies a square; repeats the sentence: "His name is John. He is a very good boy;" counts four pennies; and matches the two pieces of a visiting card cut on the diagonal, when he has an uncut card for illustration.

At age seven, a child counts thirteen pennies; describes the action in pictures rather than enumerating objects; can tell what is lacking when shown a picture where the eye, nose or mouth are omitted; copies a diamond; recognizes red, blue, green, yellow.

A bulletin recently issued by the Committee on Provision for the Feeble-Minded gives a very comprehensive outline of the scale. It is entitled "The Binet-Simon Measuring Scale for Intelligence; What It Is; What It Does; How It Does It; With a Brief Biography of Its Authors, Alfred Binet and Dr. Thomas Simon." The author of the pamphlet is Elizabeth S. Kite.

To turn to the final point, the training and treatment of mental deviates:

In the mental training of infants we generally meet with two extremes, the mother who leaves the child alone too much, or the one who urges it forward heedlessly. The baby's brain, to be sure, needs mold-

ing while it is fresh and pliable, but it should be done skilfully and gently. The mental training should begin when a child is about three months old. It should be taught to grasp and should have its power of vision and attention stimulated by bright-colored objects. A little later, with proper support, it should be placed in a sitting position in its carriage or bed. When six months old, if strong enough, it should be put in a baby chair, and given a few toys. Later, the baby tricks should be taught. Do not forget that a baby is easily fatigued and should not be overtaxed.

In the active treatment, first should be mentioned hygiene, an ample supply of fresh air, good food, bodily cleanliness and proper clothing. Keep the child out of doors as much as possible. In regard to food, it is generally required to prepare the food, just ready for consumption. The child, lacking comprehension of the sense of heat or proportion, will swallow too large portions or will burn its mouth, if the food is too hot. Those who refuse food, because of imperfect sense of taste, must be fed small quantities at frequent intervals. If there is difficulty in nursing, it is sometimes necessary to pump off the breast milk and feed the baby. As soon as possible, a mixed diet should be given, fresh fruit juice, beef juice, then cereals with milk, stewed fruit, strained vegetable soups. Water should be given between meals.

The training in cleanliness is very essential. Daily baths, preferably in the evening, should be given. Before and after each meal, the child's hands and face should be carefully washed. With persistent training in response to the bodily functions, even the most backward will learn to understand. The child should be dressed very warmly in the cold season, and extreme care should be taken that the clothing is comfortable at all times.

The main object of systematic training is to render the mentally backward child capable of helping itself in the care of its body, to look out for its health and comfort, and later to learn some simple occupation to earn a livelihood. Massage helps wonderfully at times in the ability to exercise the voluntary musculature. We make use of the child's desire for food to teach it how to look, how to listen, how to pay attention, how to grasp, how to walk, how to talk. Using all the devices for attracting the child, it should be taught to feed itself. This is usually a difficult task, but hunger and untiring efforts will accomplish wonders. Modern kindergarten training, the simple drills and games, is especially beneficial in training backward children, but do not force, nor waste time on exercises which are not absolutely indispensable. If we succeed in training a deficient child under five

years, to be clean, to feed itself, to walk, to understand words spoken to it, and possibly to make itself understood, enough will have been accomplished. Sometimes no amount of conscientious training will ever bear fruit, but it is worth while to try, and even in the slowest cases, time and painstaking effort will bring gratifying results. Remember, it is essential to be patient, tactful, and persevering. It may be given to you to awaken a child's mind, to help the feebly-gifted baby to capture and make its own the gifts which Nature has bestowed in such a twisted fashion.

REFERENCES

SHEFFIELD, H. B.: *The Backward Baby*, 1915.
BARR, M. W.: *Mental Defectives: Their History and Training*, 1904.
GODDARD, M. H.: *Feeble-Mindedness: Its Causes and Consequences*, 1914.
KITE, ELIZABETH S.: *The Binet-Simon Measuring Scale for Intelligence.*
KITE, ELIZABETH S.: Translation of *The Development of Intelligence in Children*, by Alfred Binet and Th. Simon, 1916.

NURSES AS ANESTHETISTS

The Modern Hospital for February quotes the opinion of First Deputy Attorney-General William H. Keller of Pennsylvania, as follows: "You are accordingly advised that it is not illegal for a nurse who has been trained in the administration of anesthetics to administer such anesthetic as may be prescribed by a physician under and in accordance with his orders and directions." In rendering the decision, the attorney-general calls attention to the fact that nurses are allowed to do certain things under the direction of the physician, among them administering drugs, and finds that anesthetics are drugs, no distinction being made between them and others of equal importance. Quite justly, he cites that a nurse would be likely to be under closer supervision when giving an anesthetic than when giving other drugs.